

9. An agent collaboration system for connecting agents to each other through a virtual communication channel, each agent on the virtual communication channel, comprising:

a policy storing part for storing a policy that is a collection of rules containing a rule representing a relationship between an attribute of the agent and a role assigned in accordance with the attribute;

a role assignment part having the policy storing part, for providing a role in accordance with the attributes of the agent based on the policy, ~~said role assignment part specifying appropriate contents of a role to be assigned to the agents, based on the policy and the attribute of the agents distributed on the network;~~

a role-execution condition storing part for storing the role assigned by the role assignment part and conditions for executing contents of the role; and

a processing execution part for executing corresponding contents of a role in a case where the execution conditions for the contents of the role are satisfied, and

wherein the agents collaborate with each other through the virtual communication channel based on the policy,

an authentication entity is provided on the virtual communication channel and the authentication entity authenticates access right of each agent to the virtual communication channel and contents of a role held by the role-execution condition holding part of each agent,

the authentication entity is divided into a policy approving authority, an attribute authority, and a certification authority, the policy approving authority issues a policy certification for certifying that a policy is an authentic one, based on an electronic signature provided to data describing the policy, the attribute authority issues an attribute certification for certifying attributes of each agent,

the certification authority issues a public key certification for certifying that an agent on the network has been authenticated, and

each agent includes a trust engine for interpreting the policy certification and the attribute certification, and the role assignment part specifies appropriate contents of a role to be assigned to the agents, based on the policy and the attribute of the agents distributed on the network;

~~an authentication entity provided on the virtual communication channel adapted to authenticate access rights of each agent to the virtual communication channel and contents of a role held by the role-execution condition holding part of each agent, said~~

authentication entity being divided into:

- ~~a policy approving authority issuing a policy certification for certifying that a policy is an authentic one, based on an electronic signature provided to data describing the policy;~~
- ~~an attribute authority issuing an attribute certification for certifying attributes of each agent; and~~
- ~~a certification authority issuing a public key certification for certifying that an agent on the network has been authenticated, each agent including a trust engine for interpreting the policy certification and the attribute certification.~~